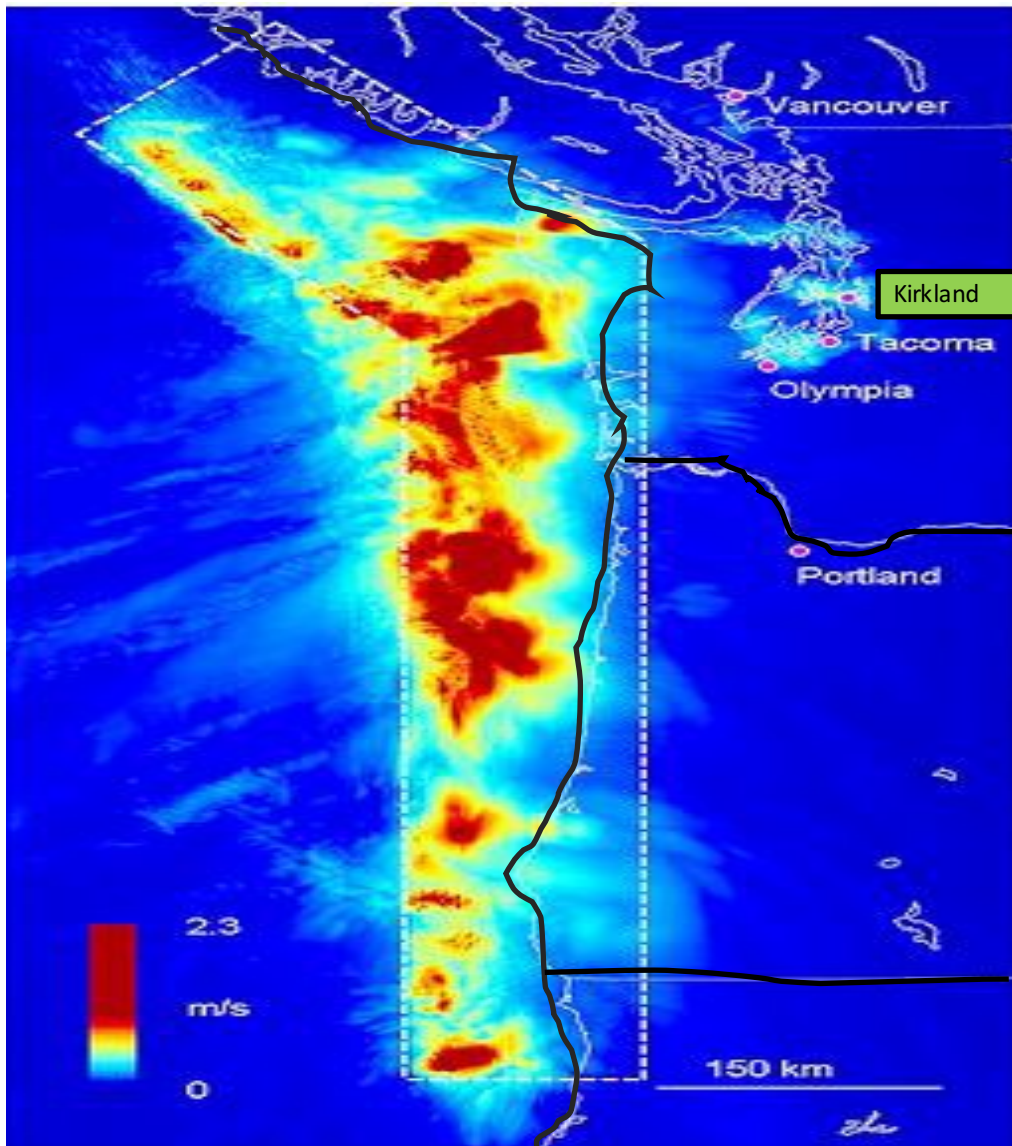




Cascadia Subduction Zone (CSZ)
Catastrophic Earthquake and Tsunami Functional Exercise
Tuesday June 7th through Saturday June 11th 2016





Cascadia Subduction Zone

- 700 miles long
- From Vancouver B.C. Canada
- All coastal lands in Washington and Oregon
- To northern California
- Last rupture was January 27th 1700

Evidence



<http://pubs.usgs.gov/circ/c1187/>

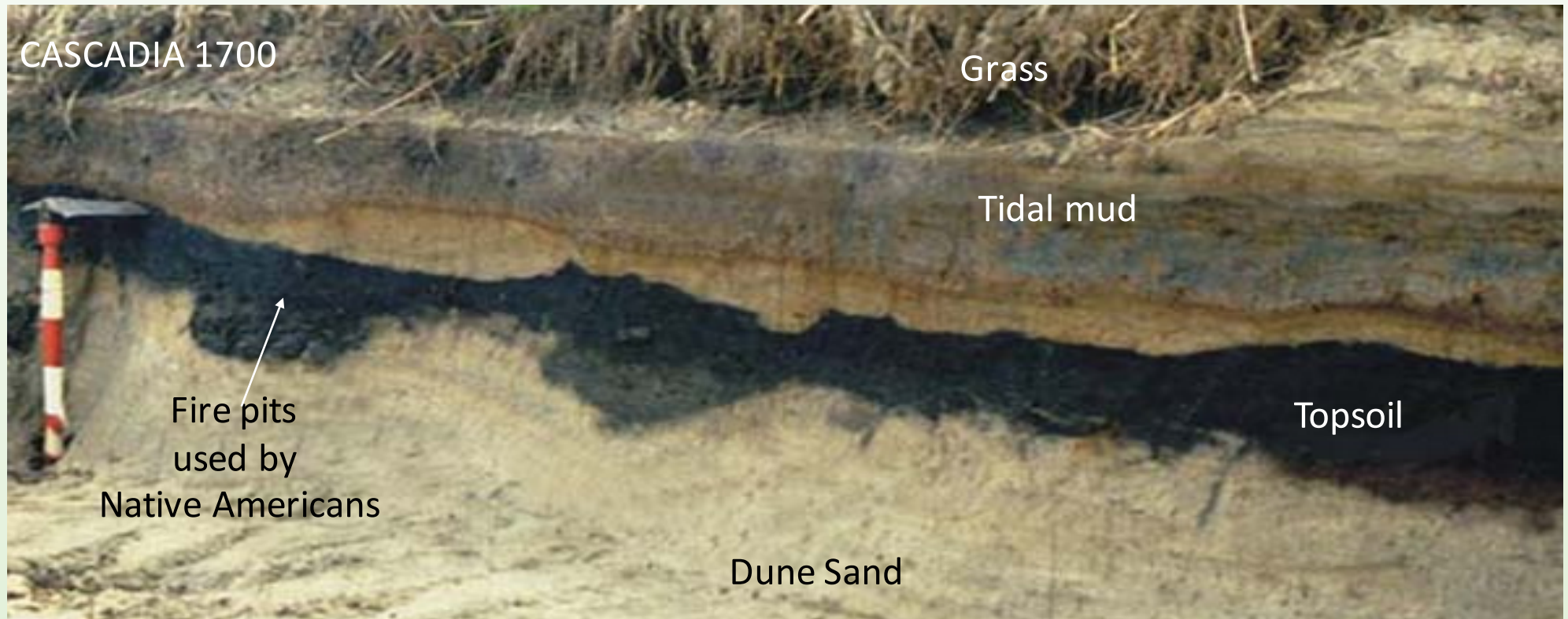
Miyako, Japan
Book of government records from 1700



Thunderbird and Killer Whale – A Tillamook legend

<https://www.pnsn.org/outreach/native-american-stories/thunderbird-and-whale/totem-art>

Evidence



<http://pubs.usgs.gov/circ/c1187/>

Evidence



This
Tsunami
Model
from
NOAA
shows
a full rip
of the
Cascadia
Subduction
Zone
will be an
international
event
from
South
America
to
Australia



Modified Mercalli Intensity Scale	
Intensity	Shaking
1	Not felt
2	Weak
3	Weak
4	Light
5	Moderate
6	Strong
7	Very Strong
8	Severe
9	Violent
10	Extreme

Description and Damage

Severe - Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.

➔ Kirkland

Violent - Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.



Associated with the earthquake

- Aftershocks

- Japan's magnitude 9.0 in 2011 preceded by a 7.5 foreshock and multiple aftershocks the largest was a 7.9
- New Zealand magnitude 7.0 was followed by a 6.1 aftershock five months later
 - Caused more damage to Christchurch than the main shock

- Landslides and Liquefaction

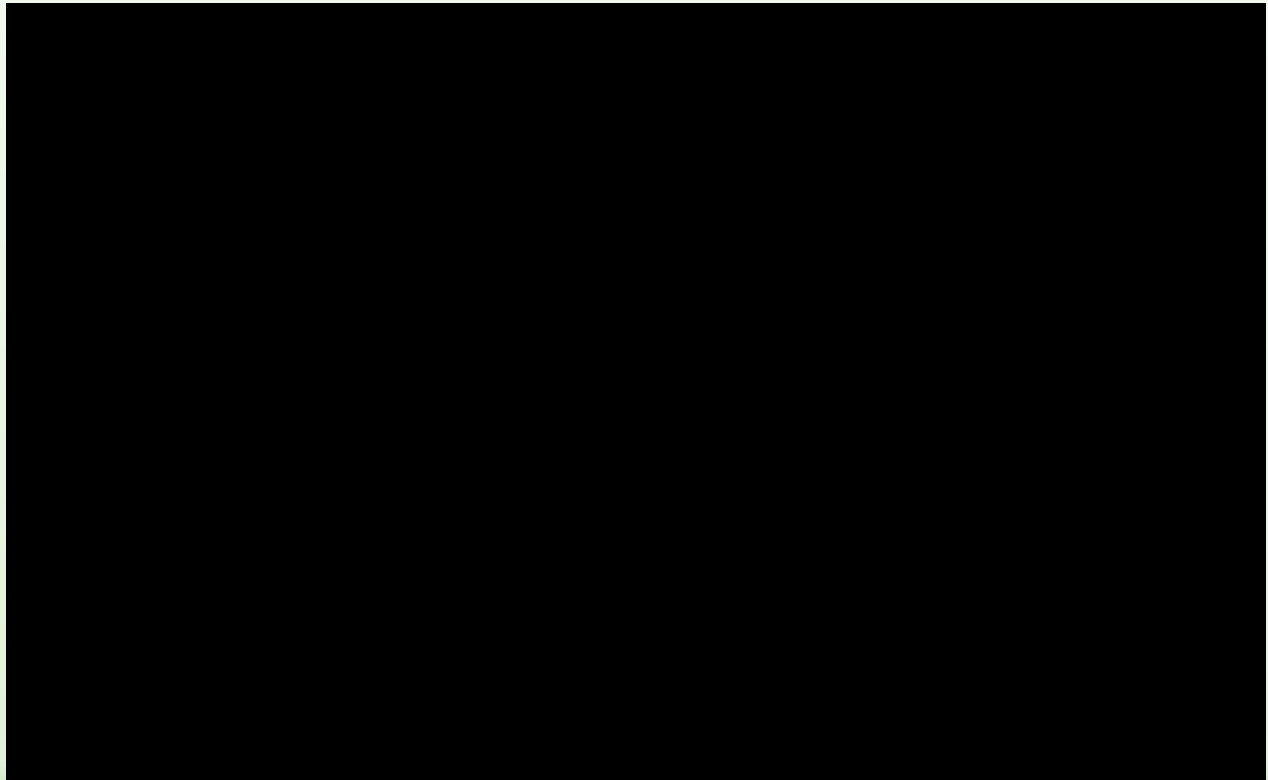
- 2001 Nisqually earthquake
 - triggered a landslide 3 days later
 - caused liquefaction at Boeing Field



<http://peer.berkeley.edu/publications/nisqually/geotech/liquefaction/airports/index.html>

Seiche – a standing wave oscillating in a body of water

- A seismic seiche will impact communities around Lake Washington
- This video shows a seiche in a hotel swimming pool during earthquake in 2010 in South America



The Five – Day Functional Exercise

- Tuesday - Friday, June 7- 10, 2016
8 a.m. – 5 p.m. daily

- Activate the Emergency Operations Center (EOC)
- Master Scenario Exercise List (MSEL)
600 injects – 2 hour shifts
- **For city employees**

- **Saturday – June 11, 8 a.m. – Noon**

- EOC will support the Stone Soup Center at Inglewood Presbyterian Church (Finn Hill)
- For CERT, ARES, MYN and **community members**

- **Partnerships**

- Local – County – State – Federal

- The Washington Air National Guard
- Northshore Utilities District
- Emergency Managers from the cities of: Bothell, Bellevue, Redmond, Mercer Island, Shoreline, and the Northshore Emergency Management Coalition
- Hope Comfort Dogs
- Field Innovation Team (Denver)
- Greater Kirkland Citizen Corps Council
- Community Emergency Response Teams
- Amateur Radio Emergency Services
- Alliance of People with DisAbilities
- Tzu Chi Buddhist Disaster Relief Foundation



Engaging the Community

- Saturday June 11th 8 a.m. – 12 Noon
- Inglewood Presbyterian Church
 - 7718 NE 141st St, Kirkland, WA 98034
- Please let the Office of Emergency Management know you are attending:
pjhooper@kirklandwa.gov
- Partnerships and engagement from all are welcome and encouraged!

- 7:30 a.m. Check in opens
- 8-9 a.m. Cascadia Subduction Zone Exercise Overview and walkie-talkie training for teams
- 9-11 (break out activities)
 - Do -Tank
 - Neighborhood Response Ops
- 11:10 Kirkland Drone Team
- 11:30 Lunch, Do-Tank Presentations and Hot Wash
- Noon – thanks for participating!

Schedule of Events for Saturday June 11th Community Cascadia Rising Functional Exercise – Inglewood Presbyterian Church Kirkland

Time	Location	Activity	And
7:30	IPC	Check In Opens	
8 – 9	Large Meeting Room in IPC	Cascadia Subduction Zone Exercise Overview Team Introductions and missions: CERT Greater Kirkland Citizen Corps Council Map Your Neighborhood Field Innovation Team King County Medical Reserve Corps Northshore Water Utilities ARES/KECT - Walkie Talkie Training	
9-10	IPC Music Room	Do-Tank Field Innovation Team - Envisioning Kirkland Post Incident	Community Water Container Fill Drill <ul style="list-style-type: none"> Northshore Water Utilities and Kirkland CERT teams will assist community members fill disaster water containers from the special rig on the fire hydrant in front of the church.
	Finn Hill Neighborhood surrounding IPC	Neighborhood Response Operations CERT Field Teams and emergent community volunteers	
		Break	
10:10 - 11:10	IPC Music Room	Do-Tank Field Innovation Team - Envisioning Kirkland Post Incident	
	Finn Hill Neighborhood surrounding IPC	Neighborhood Response Operations CERT Field Teams and emergent community volunteers	
11:10 –11:30	IPC Community Garden	Kirkland Drone Team Search and Rescue demonstration with CERT Field Team	
11:30	IPC Community Garden	Lunch Thrive Freeze Dried Food Tzu Chi Buddhist Disaster Relief Do-Tank Presentations Hot Wash (A debrief for compliments, complaints, and suggestions for the next exercise.)	
Noon		Thank you for your participation!	